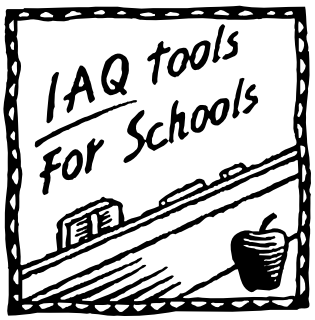


Teacher's Classroom Checklist
Background Information

Instructions

1. Read the *IAQ Backgrounder* and this section.
2. Check the "yes" or "no" or "not applicable" box beside each item. (A "no" response requires further attention.)
3. Make comments in the "Notes" section as necessary.
4. Keep these instructions and make a copy of the checklist for future reference.
5. Return the checklist portion of this document to the IAQ Coordinator.

GENERAL CLEANLINESS

Regular and thorough classroom cleaning helps to ensure good indoor air quality (IAQ). While custodians typically clean the classroom, teachers also play an important role in promoting and maintaining classroom cleanliness. The presence of dirt, moisture, and warmth stimulates the growth of molds and other biological contaminants. Unsanitary conditions attract insects and vermin, leading to possible IAQ problems from animal or insect allergens. Excessive or improper use of pesticides for secondary control of insects, vermin, and head lice can also cause IAQ problems.

ANIMALS IN THE CLASSROOM

Certain individuals, particularly those with asthma, are sensitive to animal fur, dander, body fluids and feces, and may experience reactions to these allergens.

Furthermore, individuals can become more sensitive with repeated exposure to animal allergens.

Take special care with asthmatic or other sensitive students.

DRAIN TRAPS

Drain traps, if present, can become a problem when the water in the drain trap evaporates due to infrequent use, allowing sewer gases to enter the room.

EXCESS MOISTURE

Excess moisture contributes to mold growth. Mold can trigger allergic reactions and asthma in sensitive individuals. Mold can also cause odors and other IAQ problems. Excess moisture is the result of condensation on cold surfaces, leaking or spilled liquid, or excess humidity. Note any present or recurrent signs of moisture.

Monitor for condensate (condensed water, or "fog") on cold surfaces.

Check for leaks or signs of moisture from plumbing or roofs.

Reminder: Clean spills promptly.

- For large spills on carpets, contact custodial staff immediately. (Clean and dry carpets within 24 hours to prevent mold growth.)
- If liquids spill, request that custodians clean the unit ventilator and replace the filter.
- Report previous spills on carpets or in unit ventilators, since they can affect current IAQ.

THERMAL COMFORT

Temperature and relative humidity can affect comfort and IAQ. Changing thermostat settings or opening windows to control temporary fluctuations in temperature can not only worsen comfort problems but also have an adverse effect in other areas of the school. Comfort for all occupants is a worthy objective, but because people have different levels of comfort, a more practical goal is assuring that 80 percent of the occupants are comfortable.

VENTILATION

Ventilation is the process by which air is circulated throughout the school and your classroom. Stale indoor air is exhausted to the outside, and outdoor air is drawn into the building. Schools may either have mechanical ventilation (supplied by fans) or natural ventilation (i.e., operable windows). Improperly operated or poorly maintained ventilation systems can cause serious IAQ problems. In addition, the ventilation system can carry air pollutants from one location in the school to another.

Use the diagrams in the *IAQ Backgrounder* to determine your classroom's ventilation method. If you have mechanical ventilation, confirm that air is flowing into the room from the air supply vent(s). Check for airflow by holding a piece of tissue paper near the air supply vent(s); if air is flowing, the tissue will flutter away from the supply vent. Don't obstruct the airflow with books, papers, furniture, or other obstacles. Never place anything on top of unit ventilators. In addition, maintenance vehicles or buses should never idle near the outside air intake vents. If your school or state has anti-idling policies in place, locate and review these. If not, consider creating such a policy.

If you have mechanical ventilation, confirm that air is flowing from the room into the air return grille(s). Check for airflow at air return grille(s) in the same manner as above. If air is flowing, the plastic or tissue will be pulled toward the return. In addition, a piece of plastic that nearly covers the grille will stick to the face of the grille—if air is flowing properly. Again, don't obstruct airflow with books, papers, furniture, or other obstacles.

Check for unexplained odors. Improperly operated or poorly maintained ventilation systems may cause IAQ problems. Odors, or the need to use scented air fresheners, may indicate a ventilation problem. Remember, the ventilation system can carry air contaminants from another location in the school to your classroom.

LOCAL EXHAUST FANS

Use local exhaust fans and fume hoods to prevent air pollutants and moisture from accumulating in, or spreading beyond, the local area or classroom. Local exhaust fans may be used to exhaust entire rooms (for example, bathrooms or locker rooms). Fume hoods are appropriate for activities that generate significant quantities of pollutants in a local area within a room (for example, science experiments, spray painting, and welding).

Determine if your classroom activities generate air pollutants and whether your classroom is equipped with local exhaust fans and/or fume hoods. If there are no activities that generate air pollutants, you do not need a local exhaust fan or fume hood.

Confirm that fume hoods and local exhaust fans function properly.

Check for air flow when fans are turned on. (Hold a piece of tissue paper near the fan—or within the space of the fume hood—to see whether it is pulled away from the room). Train students and others who use the classroom or equipment on when and how to use the fume hoods and fans. Conduct pollutant generating activities under the fume hood with exhaust fan turned on. Monitor use throughout the year.

Confirm that fume hoods and fans are used whenever activities that generate pollutants take place.

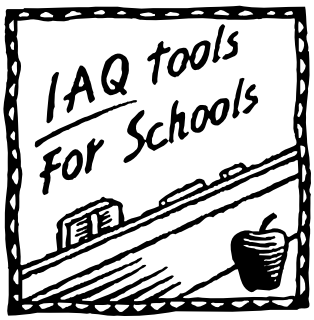
EDUCATIONAL SUPPLIES

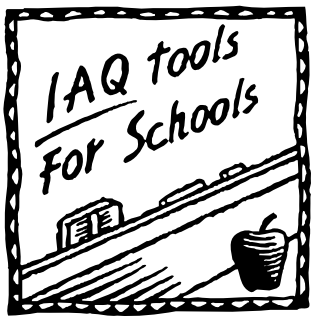
Ensure you are familiar with all your supplies. Read labels and identify precautions regarding fumes or ventilation. Request information and Material Safety Data Sheets (MSDS) from suppliers and manufacturers.

Follow good safety, handling, and storage practices. Develop appropriate procedures and have supplies available in case of spills (i.e., absorbent materials). In addition, label all hazardous supplies with the date of receipt/preparation and pertinent precautionary information. Tightly seal containers. When ready to discard the substance, follow recommended procedures. Be especially careful to secure compressed gas cylinders.

Also, remember that supply storage areas should be separate from classrooms and ventilated.

Minimize exposure to hazardous materials (as recommended in guidance documents). Substitute less- or non-





hazardous materials where possible. Always use local exhaust fans and isolate contaminant-producing activities or operations. Use moist, pre-mixed products (rather than powdered) and techniques that require as little hazardous material as possible.

ART SUPPLIES

Art supplies may emit contaminants during use and storage. In addition, certain activities (for example, firing ceramic kilns) may generate air contaminants or heat up the classroom, causing thermal discomfort to occupants.

By law, potentially toxic supplies must have appropriate labeling. In classrooms, teachers must ensure that safety precautions are followed. Examples of art supplies and activities that may contribute to IAQ problems include solvents, inks, adhesives, glues, wax varnishes, lacquers, powdered pigments, acids, clays, paints, and firing kilns. Check whether your supplies are listed as toxic or nontoxic. Supplies that are nontoxic will be labeled accordingly by the Art and Craft Materials Institute or the Center for Safety in the Arts.

Read labels and identify precautions regarding fumes or ventilation. If you make purchasing decisions or recommend products for purchase, confirm that supplies are safe to use.

SCIENCE SUPPLIES

Some teaching aids in science laboratories may contribute to IAQ problems. Remember to conduct science experiments in well-ventilated rooms using fume hoods and local exhaust systems. Basic safety precautions can prevent spills or other mishaps that cause air contamination and should be followed at all times. Examples of potentially troublesome science supplies include solvents, acids, flammables, caustics, biological products, and compressed gases.

Obtain guidance documents:

School Science Laboratories: A Guide To Some Hazardous Substances. 1984. Council of State Science Supervisors and U.S. CPSC. (800-638-2772) U.S. GPO #1984 421-506/3308.

Manual of Safety & Health Hazards in the School Science Laboratory. 1980. NIOSH/U.S. Department of Health & Human Services, National Technical Information Service. (800-553-6847) # PB-85-238-228.

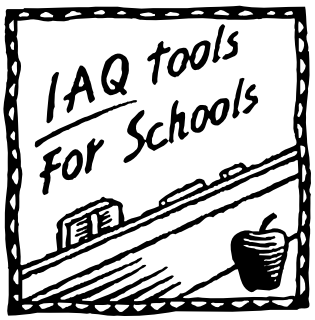
INDUSTRIAL/VOCATIONAL SUPPLIES

Industrial and vocational education materials and operations can create IAQ problems. A few examples of activities that may contribute to IAQ problems include machining, grinding, painting, soldering, welding, and baking/heating. Supplies such as solvents, fuels, and adhesives can also adversely affect IAQ.

LOCKER ROOM

Locker room conditions that affect IAQ include standing water, high humidity, warm temperatures, and damp or dirty clothing. In addition, some of the methods necessary to control germs and odors in the locker room (for example, use of disinfectants) may themselves contribute to IAQ problems if used improperly.

It is important to maintain cleanliness and reduce excess moisture in the locker room. Verify that custodians clean showers and other locker room areas regularly and properly. In addition, you should dry wet towels promptly, wash and dry soiled practice uniforms regularly, encourage students to take soiled clothes home, and operate exhaust fans to remove moisture.



Teacher's Classroom Checklist

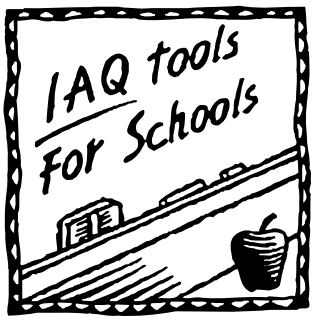
Name: _____

School: _____

Room or Area: _____ Date Completed: _____

Signature: _____

		Yes	No	N/A
GENERAL CLEANLINESS	Ensured rooms are dusted and vacuumed regularly	❑	❑	❑
	Ensured that trash is removed daily	❑	❑	❑
	Ensured no food is stored in classroom overnight	❑	❑	❑
	Stored animal food in tightly sealed containers	❑	❑	❑
	Ensured room is free of pests	❑	❑	❑
	Used unscented cleaners in room	❑	❑	❑
ANIMALS IN THE CLASSROOM	Minimized exposure to animal allergens	❑	❑	❑
	Kept animals in cages (as much as possible)	❑	❑	❑
	Cleaned cages regularly	❑	❑	❑
	Placed animal cages away from ventilation system vents	❑	❑	❑
	Consulted school nurse about student allergies or sensitivities (privacy laws may limit the information that health officials can disclose)	❑	❑	❑
	Identified potential allergies of students	❑	❑	❑
	Moved sensitive students away from animals and habitats	❑	❑	❑
DRAIN TRAPS IN THE CLASSROOM	Poured water down floor drains once per week (approx. 1 quart of water)	❑	❑	❑
	Ran water in sinks at least once per week (about 2 cups of water)	❑	❑	❑
	Flushed toilets once each week, especially if not used regularly	❑	❑	❑
EXCESS MOISTURE IN CLASSROOMS	Wiped condensate from windows, windowsills, and window frames	❑	❑	❑
	Wiped cold water pipes free of condensate	❑	❑	❑
	Checked that indoor surfaces of exterior walls are free of condensate	❑	❑	❑
	Checked area around and under classroom sinks for leaks	❑	❑	❑
	Ensured classroom lavatories are free of leaks	❑	❑	❑
	Checked ceiling tiles and walls for leaks (discoloration may indicate periodic leaks)	❑	❑	❑
	Cleaned spills promptly	❑	❑	❑
THERMAL COMFORT	Moderated temperature (generally 72°F–76°F)	❑	❑	❑
	Checked for signs of draftiness	❑	❑	❑
	Ensured that students are not seated in direct sunlight	❑	❑	❑
	Maintained humidity at acceptable levels (between 30 and 60 percent)	❑	❑	❑
VENTILATION	Located unit ventilator	❑	❑	❑
	Located air supply and return vents	❑	❑	❑
	Determined operability of windows	❑	❑	❑
	Checked air supply vent for airflow	❑	❑	❑
	Ensured the air supply pathway is not obstructed	❑	❑	❑



		Yes	No	N/A
VENTILATION (cont.)	Checked for vehicle exhaust odor	❑	❑	❑
	Checked for kitchen/food odor	❑	❑	❑
	Checked for chemical odor	❑	❑	❑
	Checked for signs of mold or mildew	❑	❑	❑
LOCAL EXHAUST FANS	Located major pollutant generating activities	❑	❑	❑
	Located exhaust fan(s)	❑	❑	❑
	Determined that fans operate	❑	❑	❑
	Checked that adjacent rooms or halls are free of odor.	❑	❑	❑
EDUCATIONAL SUPPLIES (Art, Science, Industrial/Vocational)	Reviewed supplies and their labels	❑	❑	❑
	Ensured that Material Safety Data Sheets are kept on hand	❑	❑	❑
	Developed and implemented spill procedures	❑	❑	❑
	Labeled all chemicals accurately with date of receipt/preparation and pertinent precautionary information	❑	❑	❑
	Stored supplies according to manufacturers' recommendations	❑	❑	❑
	Understood and followed recommended procedures for disposal of used substances	❑	❑	❑
	Secured compressed gas cylinders	❑	❑	❑
	Separated storage areas from main classroom area and ensured it is ventilated separately	❑	❑	❑
	Used diluted substances rather than concentrates, wherever possible	❑	❑	❑
	Minimized exposure to hazardous materials	❑	❑	❑
	Checked that fume hoods capture respirable particles, gases, and vapors released within them	❑	❑	❑
LOCKER ROOM	Locker room and showers cleaned regularly and properly	❑	❑	❑
	Soiled clothes and towels are removed regularly	❑	❑	❑

NOTES